

# Quick Start Guide

## Ulinx USB to Serial Converters 2 Port and 4 Port Devices



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### Items Included

- USB to Serial Device
- One Meter USB Cable
- CD ROM with Drivers
- This Quick Start Guide

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### General

1. One USB port is required for each installed device. The USB port can be native to the PC or it can be a USB port from an installed USB hub to the PC.

Note: The device work with USB 1.1 or 2.0 ports but has a maximum USB data rate of 12Mbps.

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### Installation

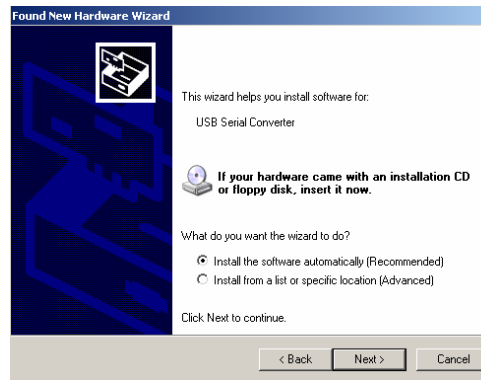
THE FOUND NEW HARDWARE WIZARD WILL RUN ONCE TO INSTALL THE USB DEVICE AND ONCE PER COM PORT INSTALLATION.

The sample screen shots are from Windows XP.

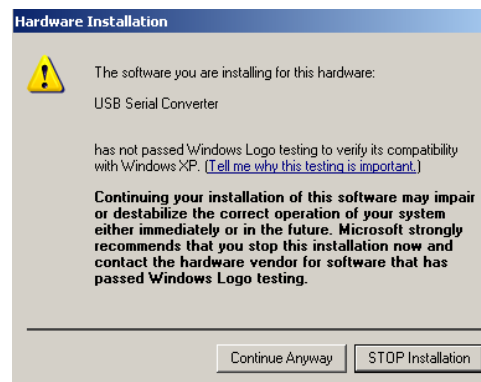
- Insert the included driver CD into the PC's CD ROM bay
- Connect the converter to the PC's USB port with the supplied cable.
- The Found New Hardware wizard will start.
- When prompted to connect to Windows Update to search for the driver, select "No, not at this time" and click Next>



- Select Install the software automatically and click Next>



- A warning concerning Windows logo testing will be displayed. Click on Continue Anyway >



- Completing the Found New Hardware Wizard will be displayed. Click on Finish >

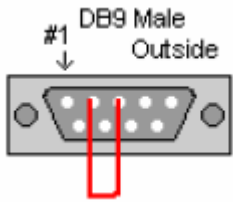


Note: The installation process consists of the installation of the USB device and then the installation process will start over again for each COM port.

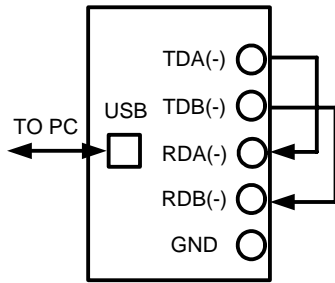
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### Verifying Installation

1. To verify the installation went correctly open the Windows Device Manager
  - Scroll down to Ports,
  - Expand the ports by clicking on the plus sign (+), this shows if the ports now exist on the PC.
  - If there are no exclamation points or other indicators of a problem the ports should be installed correctly and ready for use.
2. Verifying with a loopback test.
  - If the device is RS-232 loopback pins 2 and 3. If the device is RS-422 or RS-485 loopback the TDA(-) to RDA(-) and TDB(+) to RDB(+), if desired use the pin-out charts for the location of each pin or terminal.
  - Using Hyper Terminal or similar program, connect to the appropriate COM port. Set the desired baud rate. Ensure Hyper Terminal local echo is OFF. **(Note: Hyper Terminal is not provided with Vista and 2003 Server)**
  - Transmit data. If the same character string is returned, the test is good.

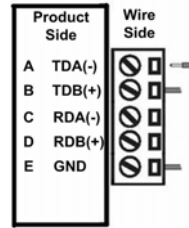


RS-232

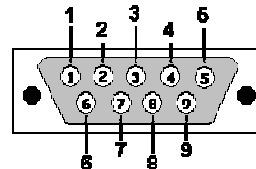


RS-485

## 6 Pinouts



RS485 Pinout (Terminal Blocks)		
Terminal Position	RS-485, 4 Wire	RS-485, 2 Wire
A	Transmit TDA (-) Output	Data A (-) Input / Output
B	Transmit TDB (+) Output	Data B (+) Input / Output
C	Receive RDA (-) Input	Data A (-) Input / Output
D	Receive RDB (+) Input	Data B (+) Input / Output
E	Ground	Ground



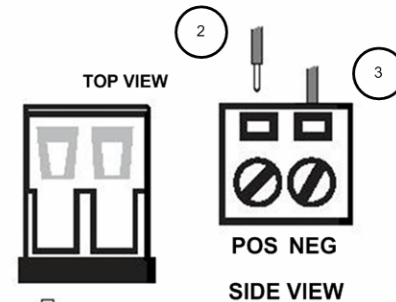
RS-232 Pinout (DB9 Male DTE)		
PIN	Signal Name	RS-232 Signals
1	DCD (Data Carrier Detect)	Input
2	RD (Receive Data)	Input
3	TD (Transmit Data)	Output
4	DTR (DTE Ready)	Output
5	SG (Signal Ground)	Ground
6	DSR (DCE Ready)	Input
7	RTS (Request to Send)	Output
8	CTS (Clear to Send)	Input
9	RI (Ring Indicator)	Input

## 7 Optional External Power for Optically Isolated Units

External Power Option:

<b>USO9ML2-2P</b>	10 to 30 VDC @ 3.0 W max.
<b>USO9ML2-4P</b>	10 to 30 VDC @ 5.0 W max.
<b>USOPTL4-2P</b>	10 to 30 VDC @ 3.0 W max.
<b>USOPTL4-4P</b>	10 to 30 VDC @ 5.0 W max.

Surrounding Air Ambient Temperature: 0 to 70° C



- One Conductor Per Terminal
- Use Copper Wire Only
- Wire Size: 28 to 16 AWG
- Tightening Torque: 5 KG -CM
- Wire Temperature Rating: 105°C Minimum (Sized for 60° C ampacity)

1. Loosen the screw to open the terminal block lead clamp.
2. Insert the power lead. TB will accept 28-16 AWG wire.
3. Tighten the screw to close the terminal block lead clamp. Ensure the clamp holds the lead securely. However, do not over tighten.

**NOTE: For Replacement Terminal Block, Order Part #7444.**

NOTE: To remove drivers from a PC, there is an Uninstall reference document on the CD ROM.

## 5 Dip Switch Setting

Note: For models with selectable RS-422/485 configurations

Dip switches allow the module to be configured for two-wire or four-wire, RS-422 or RS-485 modes. In two-wire mode the TDA (-) and RDA (-) are tied together and so are TDB (+) and RDB (+), making multi-dropping this converter into an existing network easy.

Dip Switch Settings		
Switch	Off (left)	On (right)
1	RS-422	RS-485
2	ECHO ON	ECHO OFF
3	4-Wire	2-Wire
4	4-Wire	2-Wire